

PATENT

INSTITUT FRANÇAIS DU PETROLE

**METHOD FOR MEASURING THE WETTABILITY OF ROCKS**  
**BY NUCLEAR MAGNETIC RESONANCE**

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ABSTRACT

- Method for measuring the wettability of rocks by low-field nuclear magnetic resonance.
- The method essentially comprises determining the water wet pore surface and the oil wet pore surface when the sample is saturated with water and oil, by measurements of relaxation times (T1, T2) of the sample placed in a nuclear magnetic resonance device, previously brought to various water or oil saturation states, and calculating the wettability index by combination of the values obtained for said surfaces.
- Application : hydrocarbon reservoir engineering or development, or in civil engineering, etc.